

What Is Claimed Is:

1. A plug connector comprising:

a first plug contact;

5 a second plug contact;

a conductive connecting member formed as a spring,
positioned between the first and second plug contacts and
forming an electrical contact between an inner surface of the
first plug contact and an outer surface of the second plug
10 contact; and,

a receiving element housing the conductive
connecting member between the first and second plug contacts.

2. The plug connector according to claim 1 wherein the
15 connecting member is a flat spiral spring in certain sections.

3. The plug connector according to claim 2 wherein the
connecting member further comprises flat spiral spring regions
and straight regions located one after the other.

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4. The plug connector according to claim 1 wherein the connecting member is a flat spiral spring.

5. The plug connector according to claim 1 wherein the
5 receiving element further comprises a helical groove into
which the connecting member can be inserted.

6. The plug connector according to claim 5 wherein the
connecting member is arranged to be biased within the helical
10 groove.

7. The plug connector according to claim 6 wherein a
helical axis of the connecting member runs approximately
transverse to a connecting direction of the plug contacts.
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8. The plug connector according to claim 1 wherein the
connecting member is approximately annular and the receiving
element comprises at least one transverse groove into which
the connecting member is inserted.
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9. The plug connector according to claim 3 wherein the connecting member is fastened to the receiving element at the straight regions.

5 10. The plug connector according to claim 9 wherein the receiving element is a plastic injection moulded part to which the connecting member is fastened.

11. The plug connector according to claim 2 wherein the
10 receiving element further comprises a latching element having a latching projection which is engagable with a recess located in one of the first and second plug contacts.

12. An electrical connector arrangement comprising:

15 a male plug contact having a substantially cylindrical conductive outer surface;

 a female plug contact having a substantially cylindrical conductive inner surface;

 a conductive connecting member formed as a spring;

20 and,

a receiving element housing said conductive
connecting member wherein the male plug contact biases the
connecting member outwardly and the female plug contact biases
the connecting member inwardly to form an electrical
5 connection between the male plug contact and the the female
plug contact.

13. The electrical connector arrangement according to
claim 12 wherein the conductive connecting member is a flat
10 spiral spring in certain sections.

14. The electrical connector arrangement according to
claim 13 wherein the conductive connecting member further
comprises flat spiral spring regions and straight regions
15 located one after the other.

15. The electrical connector arrangement according to
claim 12 wherein the conductive connecting member is a flat
spiral spring.

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16. The electrical connector arrangement according to
claim 12 wherein the receiving element further comprises a

helical groove into which the connecting member can be inserted.

17. The electrical connector arrangement according to
5 claim 16 wherein the conductive connecting member is arranged
to be biased within the helical groove.

18. The electrical connector arrangement according to
claim 17 wherein a helical axis of the conductive connecting
10 member runs approximately transverse to a connecting direction
of the plug contacts.

19. The electrical connector arrangement according to
claim 12 wherein the conductive connecting member is
15 approximately annular and the receiving element comprises at
least one transverse groove into which the conductive
connecting member is inserted.

20. The electrical connector arrangement according to
20 claim 15 wherein the conductive connecting member is fastened
to the receiving element at the straight regions.

21. The electrical connector arrangement according to claim 20 wherein the receiving element is a plastic injection moulded part to which the conductive connecting member is
5 fastened.

22. The electrical connector arrangement according to claim 13 wherein the receiving element further comprises a latching element having a latching projection which is
10 engagable with a recess located in one of the first and second plug contacts.